Repetetive DCB treatment for femoropopliteal lesions – a viable solution for recurrent lesions?

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Disclosure

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I have the following potential conflicts of interest to report:

- Consulting/ honoraria:
  
- C.R. Bard, J&J Cordis, Medtronic, Biotronik
Current DCB patency rates at 2 years

- **IN.PACT SFA [1,2] (N=220)**: 78.9%
- **ILLUMENATE FIH [3] (N=50)**: 80.3%
- **LEVANT I [4] (N=49)**: 57.0%
- **LEVANT 2 [5,6] (N=316)**: 58.6%
- **ITALIAN REGISTRY [7] (N=105)**: 72.4%

Evidence from DCB Trials
Long-term Freedom from TLR

FEMPAC 2Y

THUNDER 5Y
80% patency is not 100% patency!

75% TLR means that 25% of all patients underwent recurrent treatment!
Real Life Data Bad Krozingen

Treatment for restenosis after DCB

Percentage of all peripheral cases
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Endovascular Treatment of Recurrent Lesions after DCB 2016

- Recurrent ISR
- BTK only
- Rest

Numbers:
- 98
- 36
- 14
How should we treat these patients?

Stenting?
DES?
Viabahn?
Open surgery?
«Double dose» / Recurrent DCB?
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Treatment of Recurrent Lesions after DCB

- **BMS only**: 9
- **DES**: 24
- **Atherectomy + DCB**: 12
- **recurrent DCB only**: 13
- **recurrent DCB+Stent**: 50
- **Rest (Viabahn, PTA, etc.)**: 40
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Treatment of Recurrent Lesions after DCB

- BMS only: 12
- DES: 24
- Recurrent DCB: 9
- Rest (Viabahn, PTA, etc.): 103
Is recurrent DCB treatment

1. effective?
2. safe?
What we know:

-> DCB are an effective treatment for restenotic lesions

-> Overlapping does not seem to harm

-> Paclitaxel can induce adverse vascular pathology and transcriptional responses
Late lumen enlargement after DCB in peripheral arteries

Scheinert, CIRSE, 2016

Werk et al., Circinterventions 2012
Positive remodelling can mean that some parts of the treated vessel can get larger.
Clinical case, 62 y male

Claudication, calcificated SFA stenosis
Clinical case, 62 y male

3 years later: Restenosis
Clinical case, 71 y male

One month later:
Clinical case, 71 y male

Situation after ISR-treatment with DCB 2011 and 2015

Stents partially exposed
Repetetive DCB treatment for femoropopliteal lesions – a viable solution for recurrent lesions?

Yes, unless we have better options!

However we should be aware that in some patients the integrity of the diseased vessels can be permanently affected by DCB!
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